

**City of San José**  
**CLASS SPECIFICATION**  
**SENIOR HEAVY DIESEL EQUIPMENT OPERATOR-MECHANIC (3643)**

DEPARTMENT	ACCOUNTABLE TO	FLSA STATUS
Environmental Services	Heavy Diesel Equipment Supervisor	Non-exempt

**CLASS SUMMARY:**

Operates, maintains, repairs and overhauls large diesel and spark ignited engines, generators, compressors, and auxiliary equipment and handles unusual and emergency conditions. Acts as a lead to lower level employees. Performs related work as required.

**DISTINGUISHING CHARACTERISTICS:**

This is the third level class in a three class Heavy Diesel Equipment Operator-Mechanic series under the general supervision of the next higher class, Heavy Diesel Equipment Supervisor. Incumbents in this class train and lead Heavy Diesel Equipment Operator Mechanics, and handle unusual and emergency conditions. Assignments may be made to any shift in an around-the-clock operation, and incumbents must be available for work on Saturdays, Sundays and holidays. Assignments for this classification are typically at the Water Pollution Control Plant.

Duties require a heavy level of physical exertion, including exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects

**QUALIFICATIONS**

**(These qualifications are typically required. An equivalent combination of education, experience, knowledge, skills, and abilities sufficient to satisfactorily perform the duties of the job may be substituted.)**

**Minimum Qualifications**

**Education and Experience:**

High school education or GED and three (3) years of experience as a mechanic in the operation, maintenance, repair and overhaul of large diesel and spark-ignited engines, which produce air and/or generate electric power. One (1) year of the three year experience must have been performing work of a similar nature and level as the Heavy Diesel Equipment Operator-Mechanic class with the City of San José.

**Required Licensing:** (such as driver's license, certifications, etc.)

A valid CA drivers license is required.

**Other Qualifications**

**(Incumbents may be required to have different combinations of the listed qualifications, or more specific job-related qualifications depending on the position.)**

**Basic Knowledge, Skills and Abilities:**

**(Needed at entry into the job in order to perform the essential duties.)**

- Knowledge of diesel fuels and lubricants used in heavy-duty power plant operation.

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- Knowledge of hazards and necessary safety procedures involved in working with large power plants and electric power generating units.
- Knowledge of inspection, testing, dismantling, overhauling, repairing of reciprocating engine driven blowers, compressors, generators and related equipment.
- Knowledge of the principals, practices and procedures of manual switching operations of diesel-electric generating equipment.
- Knowledge of the fundamentals of electricity, its generation and distribution.
- Knowledge of standard operating procedures related to operating and adjusting the distribution of electric power.
- Ability to follow written and oral instructions.
- Ability to use mechanical hand and power tools and equipment common to large engine repair and maintenance.
- Ability to interpret charts and maintain operating logs and records.
- Ability to read and interpret meters, gauges, thermometers, and other recording and measuring devices.
- Ability to start, operate, stop and adjust large spark and diesel ignited engines and auxiliary equipment.
- Ability to provide lead direction and training.
- Ability to modify equipment for more efficient operation.
- Ability to operate power switch board, and adjust distribution of electric power.
- Ability to write instructions on the operation and maintenance of mechanical equipment
- Ability to use computers to communicate with others, to create spreadsheets, and write instructions.
- Ability to use computer stored information to diagnose equipment and system conditions
- Ability to inspect, coordinate and oversee work done by outside contractors.
- Ability to effectively schedule, assign work, train, and maintain and verify time card records.

**Desirable Qualifications**

**(Knowledge, skills, and abilities; licenses, certificates, education, experience that is more position specific and/or likely to contribute to more successful job performance.) See comment below. None of these look like desirables.**

- Ability to trouble-shoot emergency and unusual situations, and to direct and perform corrective maintenance..
- Knowledge of inspection, testing, dismantling, overhauling, repairing of reciprocating engine driven (typically 1000 h.p. and above) blowers, compressors, generators and related equipment.

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<b>DUTY NO.</b>	<b>TYPICAL CLASS ESSENTIAL DUTIES: (These duties and estimated frequency are a representative sample; position assignments may vary depending on the business needs of the department.) Duties may include, but are not limited to, the following:</b>	<b>FREQUENCY</b>
1.	Acts as a lead to lower level Heavy Diesel Equipment Operator-Mechanics, assigning, scheduling and checking work, providing technical direction, determining priorities, and training staff. As a lead, may sign timecards and may give input to the supervisor regarding the employee's performance evaluation, hiring, promotion, termination and discipline of employees.	Continuous
2.	Directs and performs preventative maintenance, major overhaul and emergency trouble-shooting of various equipment (e.g. diesel engines, pumps, air and gas compressors, gas-blending equipment).	Continuous
3.	Starts, operates, stops, and adjusts large dual-fuel and tri-fuel engines and their auxiliaries, according to load demands and characteristics.	Continuous
4.	Dismantles, overhauls, and reassembles engines, blowers and compressors.	Frequent
5.	Operates power switchboards, and adjusts the distribution of electrical power in accordance with standard operating procedures.	Frequent
6.	Reads meters, gauges, thermometers, and other recording and measuring devices showing operating conditions.	Continuous
7.	Performs scheduled maintenance and alignment checks.	Frequent
8.	Checks bearing clearance.	Occasional
9.	Checks individual firing pressures to determine load conditions and adjust for optimum efficiency.	Occasional
10.	Solves any malfunctions to allow for the smooth, safe operation of all assigned equipment.	Continuous
11.	Maintains records and prepares reports.	Continuous
12.	Coordinates and oversees work done by outside contractors.	Occasional
13.	Performs other duties of a similar nature or level.	As Required

\*Frequency defined as %, (totaling 100%) or "Continuous" (daily or approximately 20%+), "Frequent"(weekly or approximately 15%+), "Occasional"(monthly or approximately 10%+), "As Required"(Intermittent or 5% or less)

**CLASSIFICATION HISTORY :** Established 5/80: Revised 8/05; 3643s001